

Training Det - Based on principles of
loyal. effie - personality

Motto "Esprit de corps" denotes
adherence to these principles.

Officers - Example.

Chief int - efficiently

Know girls & get sympathetic point of view.

Confidence of girls. Guide to being dis-
credited or it & willing to sacrifice for it.

Backbone of

A. C. O form link bet Off. & ranks & the
Army Officer.

loyal to O & sympathetic to troop.

Impartial to authority, firm in giving
orders & reforming.

Decisive & strict attitudes to them

Justice - firmness & efficiency = respect.

Uniform - sign of trained service.

Corps grouped to form Armies, - overseas.

Battalion - Known as unit - largest
perm. unit in army - grouped to form
brigades. 3 Batt to Brig. Very indep
part. Largest. self-sufficing. Act independ.
under Divisional Adjt. Affr - Lt-Col.
Staff to assist him. - Administrative
Staff + Special Consults + takes
Signal off + 4 Co. Comm. advice. 2 J.C. 2nd
in Com. - Adj + Int. off + Med. off.
5 Co. - Major - field/O.

Smallest self-attained. 1. Headq't. Co. - 6 Platoons.

1. Signals.
2. Anti Aircraft.
3. Mortar (3" 16).
4. Carrier. Brenne
gun.
5. Pioneer
6. Admin.

Army - King
Corps - Gen. McNaughton
Division - 4 Maj-Gen
Brigade - Brigadier - Infantry -
Battalion - Lt. Col.
Company - Major
Platoon - Lieut.
Section - Cpl or Lt. Cpl.

4 Rifle Co of 3 Platoon
" 3 Section

Rank Cap. - 1
Corp - 2
Sargt. - 3, per
Sgt. - 2
Capt. - 3 - 2

Major - crown
Lt. Col. - " + 1 star
Col - " + 2 " (limited so
but - " + 3 "

Maj-Gen - baton - sword + cross + 1 bar.
Lt. - Cross, sword + baton + crown.
Field Marshall - X sword, baton, crown, level

Protection of Person & Property.

Gas mask perfect protection against all these tear gases. Inflamation, pain behind eyelids, tears. Give fresh air, little saline sol. to bathe. Little olive oil in eye - slightly warm.

Curbin Duty Gas Mask - Easy to breathe this, gas proof. Head harness for holding on only. Should be comfortable.

Harness in 2 thumbs separate 2 bands. Dig chin well in. Pull way back & release harness. Make sure straps R loose. By eyes can see if wearing correct size. Imp. Too small, Adjust strap just so comfortable & wear.

To remove - place 2 fingers under mask under chin and pull off. Don't use metal pad to pull it off.

Adjust by top 2 & then side 2 & lastly bottom 2. Last 2 to adjust to chin. X-section at centre of 2 compartments.

Inside container - 1. filled w activated charcoal & beneath pad of wool (usually marina) wool has no effect in decontaminating gas. There for nose & tear gas. Wool draws particles of gas onto it & doesn't allow 2 pass thro. Charcoal for lung & vesicular gases.

Last 72 hrs. (long) Only in use when in concentration. Protect container from moisture.

2. Inside rubber vent. Flattens down on container as breathe out. See if vent

clear from moisture. Air in this container only out this' vent. Mask not rolled up so mica glass will crack - if fractured not gas proof. In wet places rubber may rot.

1. Container - see if damaged.
3. Small valve inside (seated on container) lay perfectly flat & not injured in any way.
4. Examine for broken face piece & container.
5. Take between finger & thumb & stretch to see if porous. Look thro' 2 light. Also outlet valve.

Moisture inside must be dried - by cotton wool or hang in dry place.

Isol .03% & gently dip mask along face piece. Formalin .02%. Put away perfectly straight

Service Mask -

Container similar. Tube corrugated rubber. In bottom of C. 4 slots 2 on each side. Allow air to enter.

Face piece - strong rubber & defroster on each eye piece - air valve. Air breathe thro' tube

Comfortable pad for bck. of head.

To First Aid

A. R. P.

Click & Arthen.

Click - used to fill up where mustard & lewisite fell as well. In bombs now & good spray. Not much known about it. It is persistent, colourless & oily liquid. Some effect on nasal passages - not dust like cause 'tis vapour. Respirator complete protection again.

Arthen - non-persistent as vapour. Odd odour in low concentration of garlic. Powder persistent - grayish green or white. Can be made black by clouring. Used to contaminate coal or earth. Effect in moisture. gives fumes having funny effect in individual - lazitude inability to navigate. Thus paralyze ∴ not able to support wt. of B. Hat & rouse, won't talk, aren't asleep - 'Not bothered'. As progress of poisoning funny yellow colour. Blood cells attacked & anemia follows in & requires strong & strenuous treatment to overcome. If don't recover further results. Face turns to copper. Nervinary & liver effected. Urine 'inky red'. - After 3 days if keeps up urine ceases & death as result of convulsion. Chemical detector Type A. used

Every one 100% protected against by Gas Mask.

to detect. Give orange tint to white paper

Blister gases
in presence of liquid vesigents will
turn brown or red. K. S. K. & B. B. C.
also give same effect but tear producing
qualities give them away.

Domestic Gases. Bombing, explosion
or sabotage.
Hydro acid used in any city & destroying
venison in homes. 1 or 2 sniffs for odour.
Bittersweet smell - bitter apples.

Hydrogen sol. H_2S .
Very dangerous. Direct paralysis effect
on breathing centre of brain. Result of
explosion of domestic refrigeration plants -
storage vaults for furs.

Ammonia - part of refrigerant.

Carbon Monoxide. No odour in cities, slow in
effect to a point when terminal effect rapid.

Nitro Oxide Gases - Demolisher - explosion for
breaking down buildings.

Gas mask isn't worth anything again
these gases. Stay in presence of fresh air
where gases likely to be. Not too inquisitive
is anyone yelling if only got on "pig snout"
mask. Wait for "Service Mask".

more by rubbing. liable to introduce infection by irritation. Immediate in effect, very effective in weak concentration. Usually possible in short time & area, areas of pure area & possible to guide person struck to these place to relieve. Keep for 15 mins. - Long time to patient, think he is lost, Don't take to First Aid Post.

If have group - line up & join by chain feeling of company & follow alone. Don't get go of chain - get lost.

^{solid} Chloras ~~Chp~~ C. A. P. white crystal in body. Heavy fume, ray & smoke occurs in head. Work well if in warm ground. Usually in bomb & bursts. Known as non-persistent. Used by police by quelling mobs. Used as test for masks.

Ethyl-iodo-ate - K. S. K. -

1. persistent - liquid
2. pure form colorless - in war heavy oily dark brown liquid.
3. Pure odour of its own - called pear-drops "nail polish remover smell."
4. severe stinging - lasts long.
5. Give off fumes & long time as oily nature.

B. B. C.

1. Dark brown oily - persistent.
2. Not so irritating as ↑ but lasts 4 days.

C. A. P. cheap more likely to be used.
K. S. K. very severe - lasts.
B. B. C. severe

Nasal. - all contain arsenic. Visible appearance of smoke. Not so imp. because masks improved 100%. In masks now filter keeping out dustlike particles. Not soluble in water. can be driven off. No odorous no value & spotting.

Di-phenyl-chlor-arsine - D. A.

" " amino- " " - D. M. more likely to be used. yellow crystal, gives off yellow smoke

Di-phenyl-sians-arsine - D. C.

Lung Irritants - React dealing effects seriously not from poisons but physiological effect on lung tissues. Instead of passing thru start 2 irritate secreting mucus which makes person drown by own edema of lungs no air able to get in cause mucus in air cells.

1. Chlorine - 2. Phosgene ^(green gas) - 3. Diphosgene.

4 Chloro-Picrin

1. Time claimed - 1915 by German 1st very irritating - choking & coughing spasmodically better then starts again. Odor of chloride of lime. Like whooping cough. non-persistent.

2. Most toxic 10x more than No. 1 " " but in natural setting liquid. 46.8° boiling point. Leaves no residue but liquid. Dark brown. Hence colorless vapor at 1st given off but as liquid visible. 1 can gas also. Helps for people to put on mask because 1st noticed by running eyes. Lung action somewhat delayed. Telling of brace - People stand up. Doesn't last long.

Gases.

Lecture III.

What war gases are
Physical Characteristics.

Gas used in general sense. Don't need to be gaseous. War gas any substances acting in poisonous way upon body. Not by individual breathing. Form of liquid or vapour physiological effect.

2 classes as environment

1. non-persistent - when liberated converted in vapour, gas or smoke & not always visible except when gather moisture. Travel in cloud. Leave no

liquid residue or any residue behind them. Travel in wind & depend on velocity. Too long ^{by wind} diluted - not so much effect.

2. Persistent - usually liquid type. Evaporate slowly as oily & sticky. Give off dangerous vapor often visible. Obj. on which fall thick off fumes as long as it evaporates, or else other steps taken to neutralize substances. May lie undisturbed til interfered.

Mustard gas - depended on value of vapor alone from persistent type. Often remain in shell hole 4 days. Gas mostly shot by shells in last war. To-day light thin shelled bomb & dropped. Planes fly low & spray gas. Lift out powder. Any plane ops

Objects -

1. Causing large no. of casualties in given area in short time. People afraid of it causing chaos effecting morale of all civilt^s otherwise.
2. Reduce & arrest industrial life. - Intense price by ruining people so production can't proceed.
3. Keep military people in own quarters. To bring about surprise attack.
4. Make food & stores bad for use - wastage which is imp - common error but by enemy reprehensible. Uses combination of gases - no

Weather effects gas. Warm whether better for persistent gas. Cold " little effect or none. In liquids tendencies to freeze. Thick around to warm surroundings which takes effect. Rain often cleansing atmosphere & streets, but moisture helps evaporate. Good weather ^{for attack} - low wind, clear night, ground mist.

Effects upon Body.

1. Tear gases - effect eyes - lacrimators.
2. Nose irritants - stimulators.
3. Lung " - ask.
4. Blister Gases - vesigas.

Will mix - confuse in defense & treatment of.

1 & 2 possess features common to all liked as instances. Not fatal & not permanent in effect. Selecting in irritation in nerve endings of eyes - blinded by tears - overflow, swollen & hot by caused